

CLAIMS

What is claimed is:

1. A graphical user interface, comprising:
a first region control initiating a first function when activated;
a second region control associated with the first region control and initiating a second function;
a tracking menu boundary surrounding the first and second region controls; and
a tracking symbol tracking a position of a position transducer moved by a user, movable within the first and second region controls, initiating movement of the interface to track the tracking symbol when the boundary is encountered by the tracking symbol during movement of the tracking symbol and indicating event focus for activating and performing the first and second functions.
2. A user interface as recited in claim 1, wherein the second region control surrounds the first region control.
3. A user interface as recited in claim 2, wherein the first region control is circular in shape.
4. An interface as recited in claim 1, wherein the second region control is a most frequently used function.
5. An interface as recited in claim 1, wherein the first function is a zoom function and the second function is a pan function.
6. An interface as recited in claim 1, wherein the interface is semi transparent when the functions are not activated, transparent when the functions are activated and one of a zoom and pan icon replaces the tracking symbol when the functions are activated.
7. An interface as recited in claim 1, wherein the first region control is circular shaped and the second region control is ring shaped.
8. An interface as recited in claim 7, wherein the second region control is made

invisible during movement and an icon for the second region control is displayed when the tracking symbol is over the second region control.

9. An interface as recited in claim 7, wherein the second region control is segmented into ring segments each being a different control.

10. An interface as recited in claim 7, further comprising a ring control having a ring shape surrounding the second control region and initiating a third function when activated.

11. An interface as recited in claim 10, further comprising a button control initiating a third function when activated and located on a boundary between the first and second region controls.

12. An interface as recited in claim 10, further comprising a button control initiating a third function when activated and located within a region.

13. An interface as recited in claim 1, wherein the interface is transparent when the one of the functions are activated and semitransparent.

14. An interface as recited in claim 1, further comprising a button control initiating a third function when activated and located on a boundary between the first and second region controls.

15. An interface as recited in claim 1, further comprising button controls initiating a functions when activated and located on a boundary between the first and second region controls and creating access channels for movement of the tracking symbol within the interface.

16. An interface as recited in claim 1, wherein the second region control has an exterior graphic edge and the tracking boundary coincides with the exterior graphic edge.

17. An interface as recited in claim 1, wherein the interface is invoked by pressing an activation key.

18. An interface as recited in claim 1, wherein the interface is displayed while an activation key is active.

19. A graphical user interface, comprising:
a circular shaped first region control initiating a zoom function when activated;
a ring shaped second region control surrounding the first control region control and initiating a pan function when activated;
a ring control having a ring shape surrounding the second control region and initiating a third function when activated, the third function being a most frequently used function;
a button controls initiating a additional functions when activated, located on a boundary between the first and second region controls and creating access channels for movement of the tracking symbol within the interface;
a tracking menu boundary surrounding the ring control,
wherein the interface is semi transparent when the functions are not activated, transparent when the functions are activated and function icon replaces the tracking symbol when the functions are activated,
wherein the second region control is made invisible during movement and an icon for the second region control is displayed when the tracking symbol is over the second region control, and
wherein the second region control has an exterior graphic edge and the tracking boundary coincides with the exterior graphic edge.

20. A user interface, comprising:
a movable control having a first function activatable in an entire peripheral region of the control and a second function activatable in a central region of the control; and
a tracking symbol movable within the control and moving the control when an exterior edge of the peripheral region is encountered.

21. A user interface, comprising:
a tracking menu having a first function activatable in an entire peripheral region of the menu, a second function activatable in a central region of the menu and a tracking symbol tracking a position of a user positionable input transducer.

22. A method, comprising:
 - displaying a pan-zoom tracking menu tool;
 - allowing a user to select pan and zoom operations using the tracking menu tool and an input transducer; and
 - performing a selected one of the pan and zoom operation responsive to movements of the input transducer by the user.
23. A method as recited in claim 22, displaying a corresponding pan and zoom tracking symbol icon as a replacement for the tool during the performing.
24. A method as recited in claim 23, wherein replacement occurs when the tool is pinned.
25. A method as recited in claim 22, further comprising designating a zoom control axis responsive to initial movement of the input transducer after the zoom operation is selected.
26. A method as recited in claim 25, further comprising controlling a zoom scale factor responsive to a projection of transducer movements onto the control axis.
27. A method as recited in claim 22, wherein the tool includes a replaceable control and said method further comprises designating the replicable control as the most recently selected pan and zoom operation.
28. A method as recited in claim 22, wherein the tool can be pinned and the tool is unpinned when the transducer moves beyond an unpin border.
29. An apparatus, comprising:
 - a display;
 - a pen type input transducer; and
 - a computer coupled to the display and transducer and providing a pan-zoom tracking menu on the display and allowing a user to select and perform pan and zoom operations the transducer input.

30. A computer readable storage controlling a computer via a pan-zoom tracking menu having the appearance of a center and a surrounding ring and interpreting transducer input events as pan and zoom selection and control events.

31. A computer readable storage controlling a computer by producing a graphical user interface on a display that has an appearance of a center and a surrounding ring graphic, moving the graphic on the display as a tracking menu responsive to movement of a pen, and interpreting input events initiated by the pen as pan and zoom selection and control events.